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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,418	04/17/2006	Rolf G. Hallin	UPPS0101PUSA	9026
22045 7590 12/31/2008 BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075				
EXAMINER				
COHEN, LEE S				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/595,418

Applicant(s)

HALLIN, ROLF G.

Examiner

Lee S. Cohen

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-53 is/are pending in the application.
- 4a) Of the above claim(s) 48-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-47 and 51-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Claims 48-50 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a non-elected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on November 7, 2008. This is not found persuasive for the reasons set forth in the restriction requirement

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 29, 31, 34, and 44-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 29 – “each active surface” is vague since only a single active electrode has been set forth. Claim 34 – “at least one ... active surface” is vague since only a single active electrode has been set forth. Claim 44 – the recording step is vague as it is unclear how the recording is performed using the recited electrodes.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 28-33 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hjort (4,084,583). Applicant's attention is directed to Figures 10-12. The electrode structure is detailed at column 4, line 55 – column 5, line 34. Particular processing circuitry is shown in Figure 13. The intended use fails to patentably define over the reference.

Claims 28-34 and 40-42 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Arnold et al (5,724,984). Applicant's attention is directed to the various Figures showing a central electrode surrounded by multiple electrodes. The electrode structure is detailed at column 3, line 35 – column 4, line 16. multiple carriers is shown in Figure 7. Particular processing details is disclosed at column 4, lines 17-30.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35, 36, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al (5,724,984) in view of Merilainen (6,961,603). Arnold et al fail to show the particular electrode structure. The use a raised area with plated sides as well as needles is well known as disclosed by Merilainen. Given this teaching, it would have been obvious to the skilled artisan to use such structure for the electrodes to permit more precise detection of signals using the process of Arnold et al.

Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al (5,724,984) in view of Howson (4,082,087). Arnold et al fail to show the particular electrode

structure. The use of recessed electrodes is well known as disclosed by Howson. The electrodes extend along the sides of the recess and edges of the recess extend upward from the bottom surface of the carrier. Given this teaching, it would have been obvious to the skilled artisan to use such structure for the electrodes to permit more precise detection of signals using the process of Arnold et al.

Claims 44-47 and 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hjort (4,084,583). Hjort shows the basic method of recording by summing signals but fails to show the use of a single stimulus and the particular processing circuitry. The application of a stimulation signal prior to recording neural signals is well known in the art and would have been obvious to the skilled artisan. The other particular processing (inverting, delaying and muting) techniques are old well known and deemed to have been obvious processing expedients to optimize signal detection since a predictable result would ensue.

Claims 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al (5,724,984). Arnold et al shows the basic method of recording by summing signals but fails to show the particular processing circuitry. The particular processing (inverting, delaying and muting) techniques are old well known and deemed to have been obvious processing expedients to optimize signal detection since a predictable result would ensue.

Response to Arguments

Applicant's arguments with respect to the prior rejections have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee S. Cohen whose telephone number is 571-272-4763. The examiner can normally be reached on Monday-Friday, 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lee S. Cohen
Primary Examiner
Art Unit 3739

/Lee S. Cohen/
Primary Examiner, Art Unit 3739
December 10, 2008